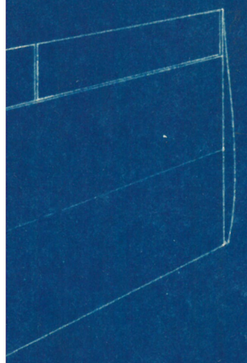
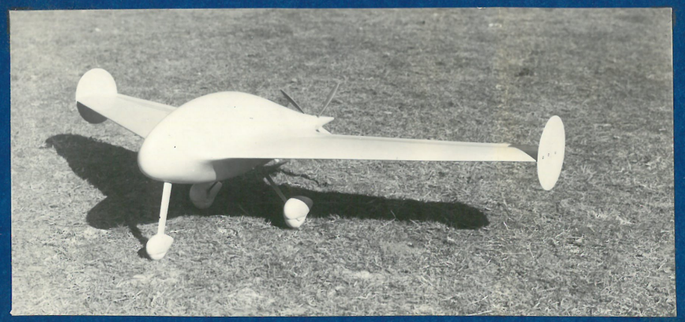
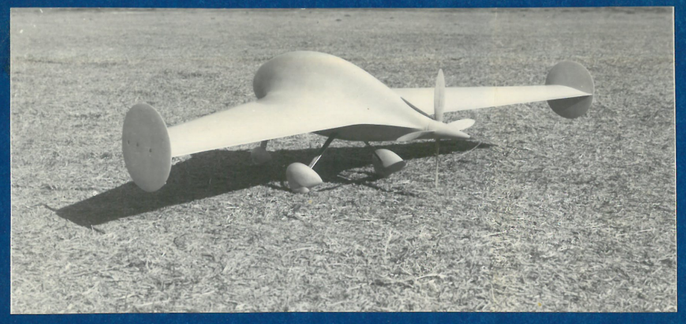


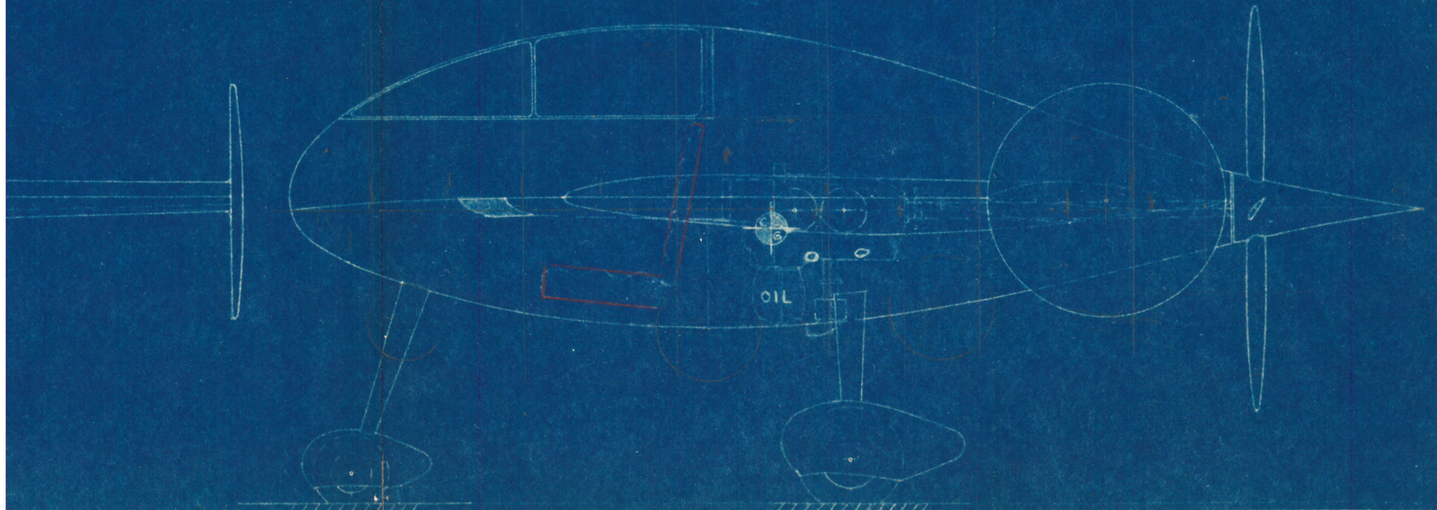
RACER
(GOODYEAR TROPHY)
FLYING WING

Designer Wm F. Schult

Scale ~ 1"=20" Date 10/20/47







PAGE
MODEL S-26
REPORT NO.

~ DIMENSIONS ~

SPAN		=	22.5'	
LENGTH		=	12.33'	
HEIGHT		=	5.5'	
CHORD (Basic Root = 6.25' or 75"	Actual)	=	12.33'	148."
" (Tip) (Wash-out 2°)		=	2.58'	31."
" (Mean Aerodynamic)		=	4.675'	
THICKNESS (Basic Root = 0.625' or 7.5"	Actual)	=	3.333'	40."
" (Tip)		=	0.258'	3.1"
T/c (Basic Root = .10)	Actual	=	.0.27	
" (Tip)		=	0.10	
AREA (Basic Wing, Plan)		=	99.5 □'	
" (Fins)		=	10. □'	
ASPECT RATIO (Basic Wing) = 5.08,	Fin Effect =		6.22	

~ WEIGHT ~

EMPTY		609.5#
WING (Basic) & FIN	=	180.3
CENTER SECTION	=	60.
LANDING GEAR	=	73.8
POWER PLANT	=	235.5
FIXED EQUIPMENT	=	59.9
USEFULL LOAD		290.5#
PILOT & HELMET		173.
CHUTE		20.
FUEL (15 GAL'S)		90.
OIL (1 GAL.)		7.5
GROSS WEIGHT		900.#

~ PERFORMANCE ~

POWER ~ CONTINENTAL 85 B.H.P. FIXED PITCH PROP. 4.25' DIA. 4 BLADE

ALTITUDE	V_{min}	V_{max} (m.p.h.)	CLIMB'/min	TIME TO ALT. min	RANGE
SEA LEVEL	60.	205.	1380.	0.	@ $L/D_{(max)}$ = 19.3
5,000.		202.	1105.	4.0	= 775 miles
10,000.		195.	820.	9.2	
15,000.		182.	530.	16.7	V = 92 m.p.h.
20,000.		160.	225.	30.5	
22,000. (Service Ceiling)		149.	100.	42.8	

Note: Performance based on 85 B.H.P.

Pulse Jet
16" Dia. 10.5#
Length 43"